

REMARKS/ARGUMENTS

Reconsideration of this patent application is respectfully requested in view of the foregoing amendments, and the following remarks.

On Page 3 of the Office Action, claims 1 to 10 were withdrawn from further consideration as being drawn to a nonelected invention.

The amendments to this patent application are as follows. Independent method claim 11 has been amended in the preamble portion thereof in order to recite:

"A method of inserting a bearing jacket and a monolith of a catalytic converter, in particular of a motor vehicle, into a pipe, wherein before inserting the monolith with the bearing jacket into the pipe..."

Also claim 11 was amended by adding at the end of claim 11 "wherein the monolith with the bearing jacket pressed thereon is inserted into the pipe."

Support for these amendments to claim 11 are found in claim 14 as originally filed, and in the paragraph bridging pages 6 to 7 of the present Specification, as well as the paragraph in lines 7 to 17 on page 8 of the present Specification. Claims 11 to 14 were amended to change "characterized in that" to "wherein".

The Applicants comment on the prior art rejections of the claims as follows:

The present invention is directed to a method of inserting a bearing jacket (2) onto a monolith of a catalytic converter, in particular of a motor vehicle, into a pipe, wherein before inserting the monolith with the bearing jacket into the pipe

-the bearing jacket (2) surrounding the monolith (3) on the periphery is pressed onto the monolith (3) in a first peripheral section (8) during an initial phase and in a

second peripheral section (9), whereby the two peripheral sections (8, 9) together are smaller than the total circumference of the monolith (3) surrounded by the bearing jacket (2) pressed onto it;

-the bearing jacket (2) is pressed onto the monolith (3) during a subsequent second phase in at least one third peripheral section (16) situated between the first peripheral section (8) and the second peripheral section (9), whereby the first peripheral section (8) and the second peripheral section (9) together with all the third peripheral sections (16) are the same size as the total circumference of the monolith (3) surrounded by the bearing jacket (2) pressed onto it; and wherein the monolith with the bearing jacket pressed therein is inserted into the pipe.

The Dryer U.S. Patent No. 5,118,476 in column 1, in lines 22 to 48 discloses having the purpose to reduce the size and number of parts in a catalytic converter while at the same time

increasing its effectiveness and improving its construction and manufacture.

This occurs in *Dryer* by means of a substrate support in the form of a tubular converter body which is reduced in diameter at a central portion to compress a support mat around a catalyst substrate. In one form, the ends of the body are formed to a spherical radius to produce a converter substrate support that can be shipped "as is" or assembled at once into a converter. This form of converter is completed by attaching inlet and outlet bushings to the ends of the substrate support and this can be done in the factory or at some point downstream. In another form, the body is in two halves, each of which has a bushing formed in it. One of the halves is reduced in diameter to hold the substrate and the other half is pressed over and secured to it.

This provides a construction and manufacture that results in a converter that is quite short in length, has few parts, has maximum effectiveness since 100% of the substrate end faces can be used.

More particularly, Dryer (US 5,118,476) discloses in Fig. 5 to 10 a method of inserting a monolith 7 with a bearing jacket 13 into a pipe 3, wherein the monolith 7 with the bearing jacket 13 loosely enwrapping the monolith 7 are inserted into the pipe 3, wherein the pipe 3 together with the bearing jacket 13 are pressed onto the monolith after inserting monolith 7 with bearing jacket into pipe 3.

Since the forces necessary for pressing the pipe 3 are very much higher than forces necessary for pressing the bearing jacket 13, which usually is an insulating mat, there exists a risk of damaging the monolith, if pipe 3 and bearing jacket 13 are pressed together onto the monolith 7.

The Aranda U.S. Patent No. 6,317,976 discloses in column 1, in lines 12 to 18 catalytic converters for purifying exhaust gases, and a method for forming catalytic converters having non-round honeycomb substrates wherein the method results in minimal buckling of the converter's metal shell and uniform compressive forces being exerted on the encircling mat and the honeycomb substrate.

Aranda in column 2, lines 50 to 67 and in column 3, in lines 1 to 23 discloses overcoming the problems and shortcomings

inherent in current methods of forming non-round catalytic converters; i.e., buckling or deformation of the metal shell upon compression. In other words, the formation of non-round catalytic converters that results in balanced forces being exhibited upon the metal shell upon compression and which exhibits a substantially uniform compressive load upon the encircling mat and the honeycomb structure thereby avoiding localized compressive failure, inadequate axial retention of the honeycomb substrate, and buckling of the metal shell.

These are achieved in Aranda by utilizing a resizing die, in the compressive closing formation, which effectively results in both balanced forces being exerted on the metal shell and uniform compression of the honeycomb substrate. In general, the method of manufacturing these catalytic converters having non-round honeycomb substrates comprises the following steps: (1) wrapping a non-round monolithic ceramic substrate, having a major and a minor orthogonal axis, in a sufficient amount of the supporting mat material whereby the substrate's peripheral surface is substantially covered; (2) inserting the wrapped substrate into a metal shell, having a plurality of nodal points, and which substantially surrounds the wrapped substrate; (3) placing the metal shell in a resizing die having a plurality of fingers, and associated gaps therebetween, extending axially along

substantially the entire surface of the metal shell whereby the nodal points of the metal shell are positioned along a portion of a die finger and the placement of the metal shell and wrapped substrate, within the resizing die is such that the axes of the resizing die are angularly offset from the major and minor axes of the substrate; (4) compressively closing the metal shell around the wrapped substrate by displacing the fingers of the resizing die radially inward to provide a gas tight seal and to hold the compressive stress by; and, (5) securing the metal shell to provide a gas tight seal and to hold the compressive stress.

More particularly, *Aranda* (US 6,317,976) discloses a method similar to *Dryer*. According to Fig 1. and 2, again, the monolith 10 and the bearing jacket 12 enwrapping loosely the monolith 10 are first inserted together into a pipe 14. And second the pipe 14 and the bearing jacket 12 are pressed together onto the monolith 10.

Therefore, neither *Dryer* nor *Aranda* provides any teaching or suggestion to one skilled in the art for the first step of pressing the bearing jacket onto the monolith using the specific steps recited by amended claim 11, and for second step of inserting the monolith together with the bearing jacket pressed onto this monolith into the pipe.

For all the reasons set forth above, none of the prior art references provide an identical disclosure of the claimed invention. Hence the present invention is not anticipated under 35 U.S.C. 102. Withdrawal of this ground of rejection is respectfully requested.

In conclusion, selected claims 11 to 14 have been amended, and claims 1 to 10 have been withdrawn from further consideration as being directed to the non-elected invention. In view of these amendments, it is firmly believed that the present invention and all the claims, are patentable under 35 U.S.C. 103 over all the prior art applied by the Patent Examiner.

A prompt notification of allowable is respectfully requested.

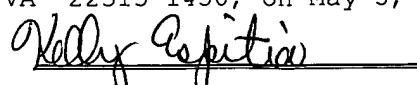
Respectfully submitted,
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